

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS: LINDA S. POWERS and CHRISTOPHER R. LLOYD

SERIAL NO.:

FILED HEREWITH:

FOR: METHOD AND APPARATUS FOR DETECTING THE  
PRESENCE OF MICROBES AND DETERMINING THEIR  
PHYSIOLOGICAL STATUS

PRELIMINARY AMENDMENT

December 30, 2003

Mail Stop Non Fee Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Please amend Claims 14, 15 and 16.

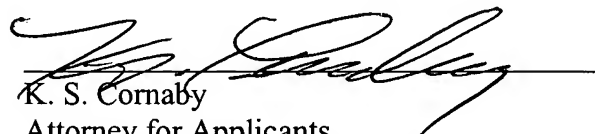
14. (Currently Amended) Apparatus for the detection of microbes in a sample  
on a nonliving ~~surface~~ surface, ~~or in air~~ air, or liquid comprising:
- a. means for directing electromagnetic radiation towards the sample,  
said means adapted to emit radiation at energies capable of  
exciting at least one intrinsic microbial fluorophore;
  - b. at least one detector for electromagnetic radiation capable of  
converting the emitted, or ~~reflected/scattered~~ reflected and  
scattered radiation into electrical signals, said detector adapted to  
detect electromagnetic radiation at wavelengths above 320 nm to

detect the minima and maxima associated with the fluorescence emission of said microbial fluorophores; and

- c. means for analyzing the electrical signals corresponding to the fluorescence of the intrinsic microbial fluorophores and the ~~reflected/scattered~~ reflected and scattered excitation ~~energies~~ intensities to determine the presence of microbes.

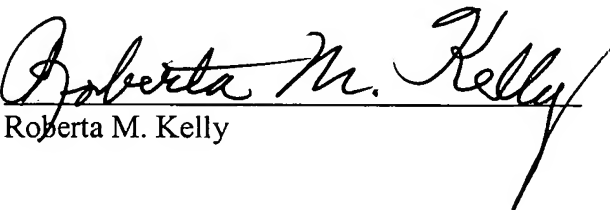
15. (Currently Amended) The apparatus ~~method~~—as defined in ~~claim 1~~ Claim 14, wherein the electromagnetic waves are directed towards the microbes in time-modulated pulses.
16. (Currently Amended) The apparatus defined in ~~Claim 14~~ Claim 14, wherein the means for directing electromagnetic radiation includes means for time-modulating the electromagnetic radiation.

Respectfully submitted,

  
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**CERTIFICATE OF SERVICE**

I certify that this correspondence is being deposited with the United States Postal Service as Express Mail EV 057527341 U.S. in an envelope addressed to Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Washington, D.C. 22313-1450 on December 31, 2003.

  
Roberta M. Kelly